POPULAR MECHANICS MAGAZINE 8-1-1946
RADIO and ELECTRONIC BLUEPRINTS

The Radio and Electronic plans listed include all of the favorite well-known Popular Mechanics Magazine laboratory-tested circuits that are available in Blueprint form. The following list includes detailed construction articles for the beginner as well as the advanced student and experimenter. When ordering simply quote the R- numbers of the blueprints desired and enclose the proper amount. Address Popular Mechanics Magazine, Radio and Electronics Department, 200 E. Ontario Street, Chicago 11, Illinois. Back copies of the magazine can be obtained from our book Department for 25¢ per copy if they are in stock. Back issues are not required for construction as all blueprints are complete in every detail. NOTE- Original material lists for these practical simplified construction articles are always available to students and experimenters from our Radio and Electronics Department, upon application, without charge; they are also included with each blueprint. The student builder should always have the original detailed list of the parts specified for each construction article to avoid impractical substitutions and insure maximum results. These units can be assembled from standard parts that the active student, experimenter and serviceman has on hand, or, can find listed in any of the new radio parts catalogs. Complete kits of original parts for many of these units will be found listed in the new catalogs issued by several large radio and electronic mail-order parts houses. Their addresses are available upon request.

If there are any points in these blueprints or material lists not clear to the builder, or if the sources of the parts and materials specified are desired, he may write to the Radio and Electronics Editor Popular Mechanics Magazine, 200 E. Ontario Street, Chicago 11, Illinois for further information. There is no charge for this service. Please note that blueprints are now listed for many of the outstanding Radio and Electronic construction articles that appeared in this Magazine during the war when paper restrictions limited the number of new blueprints that could be made available to students and experimenters.

R-346 Electron-Coupled Zero-Beat Metal Detector; ideal for locating buried metallic objects, also useful for locating and tracing pipes in walls and masonry. A definite improvement over the prowar "zero-beat" treasure finder. Tubes: 1-each 1C5-GT, 1A7-GT, 1D8-GT, 1N5-GT; Batteries: 2- 1 1/2 volt and 1- 45-volt-------Aug. 1946-25¢

R-345 Hi-Efficiency 2-Meter Transceiver; a combination transmitter and receiver for licensed amateur radio operators. A separate power supply unit for a.c. line operation is included. May also be used for mobile operation with a 6-volt vibrator-type power supply. Tubes: 1- Raytheon type 6N4, 1- 7C5 and 1- type 80 rectifier..... .....June 1946.....25¢

R-344 Self-Contained P.A. Amplifier with Record Player; a compact 10-watt audio amplifier with speaker and record player combined in a standard metal case which also acts as the speaker baffle. Tubes: 1- 6N7, 2- 6V6, 1- 6J7 and 1- 5Z3 rectifier...May 1946.....25¢

R-343 Electronic Volt-Ohm Reader for Experimenters; a voltage and resistance reader using a "magic eye" electron-ray tuning tube instead of a meter. Provides a rugged test instrument for advanced students and experimenters. Tubes: 1- 6SF5, 1- 6U5/6G5 and 1- 37.... .....April 1946.....25¢

R-341 Three-Tube Short-Wave Superheterdyne; a real DX getter. Tunes from 5400 to 14,500 kc. using hand-wound plug-in coils. One oscillator coil covers the entire range. Tubes are as follows: 1-6K8-GT, 1-6C8-G and 1-5Y4 rectifier. Power section may be replaced with batteries.....Feb. 1946.....25¢

R-342 1946 "LITTLE GIANT" A.C.-D.C. SUPER USES DUAL-PURPOSE TUBES; first postwar student model using standard coils, and other parts now available to students and experimenters. Tubes: 1-12SA7-GT, 1-12SQ7-GT, 1-12K7-GT. 1-70L7-GT. Or the following tubes may be substituted: 1-6SA7-GT, 1-6SQ7-GT, 1-6K7-GT, 1-32L7-GT..... .....Mar. 1946.....25¢

R-339 Electronic Photo-Print Timer for Enlarger or Contact printer; accurately controls timing to make uniform prints, especially important when making a large number of duplicate prints. Uses one type 117L7 GT tube.....Nov. 1945.....25¢

R-338 Three-Tube Eight-Watt "Cake Pan" Phono Amplifier; has excellent tone quality and volume for use with any record player. Tubes: 1- 80; 1- 6L6-G and 1- 6C8-G.....Oct. 1945.....25¢

R-337 Two-Tube "Pockette" Portable Operates on Flashlight Cells; a 2-tube "walkie-talkie" type receiver small enough to slip into your coat pocket. Uses built-in loop antenna.....Sept. 1945.....25¢

R-335 Two Low-Cost Crystal Receivers For Experimenters; one a simple beginner's set in which no variable tuning condenser is required; the other, a Selective Set That Includes a Wave Trap. June '45...25¢

R-332 1945 Little Giant T.R.F. Broadcast Set Has Push-Pull Output Stage; hand-wound coils. 2-6G6-G 6K7-G; 76 & 37.....Mar. 1945.....25¢

-OVER-

R-331 High-Quality 10-Watt Phono-Radio Amplifier. For record player or FM & AM radio tuners. 6C5, 6N7, 2-6A3's, 5U4..Feb. 1944....25¢

R-328 Desk Lamp "DX-ER" for Boy's Room. A simple two-tube a.c.-d.c. broadcast receiver using two type 37 tubes and a 40-watt lamp. Built in card file box; lamp mounted on case....Oct. 1944.....25¢

R-327 Dual Phono Unit Has Self-Contained Amplifier and Electronic Controls; for fading records and microphone in and out for musical background and sound effect records for home movies. Also makes portable public address amplifier.....Aug. Sept. 1944..25¢

R-323 Portable Phono-Attachment and "Mystery"Player; operates through any radio receiver or amplifier, either direct or by means of a built-in "Wireless" phono oscillator; Tubes: 1-6A7; 1-6C6..... .....April 1944..25¢

R-317 B-Power Unit for Small Receivers; hum-free a.c.-d.c. power unit for operating battery portables on power line. Tubes: 2-37. Note-Other tubes can be substituted for the 37's such as 6C6; 6D6; 76; 77 or 78 with suitable sockets.....Aug. 1943...25¢

R-316 "Pop Corn Can" Signal Generator for Home Set Servicing; a.c.-d.c. oscillator provides signals for calibrating receivers. Tubes: 1-7A7LM loctal (interchangeable with a 7A7); 1-6C5-GT or a GT/G..... .....July 1943.....25¢

R-314 Universal Testing Bridge Measures Unmarked Parts; measures resistors, condensers and chokes without the use of a meter. Tubes: 1-6A6; 1-56.....April 1943....25¢

R-313 Code-Practice Oscillator and Short-Wave Code Receiver for students. Two simple and efficient a.c.-d.c. "breadboard" units. A single 25A7-GT tube servos both units.....Jan. Mar. 1943...25¢

R-312 1943 Little Giant T.R.F. Receiver. A practical a.c.-d.c. broadcast band set for students, experimenters and beginners. Non-critical parts; tubes 12K7-GT; 12J7-GT; 70L7-GT.....Mar. 1943...25¢

R-311 Two modern crystal receivers. One is a straight highly selective crystal set; the other employs a 70L7 tube as a.c.-d.c. amplifier.....Feb. 1943....25¢

R-310 Four-Watt a.c.-d.c. Phono Amplifier. For use with any record player; speaker is mounted on soft wood baffle. Non-critical "Junk Box" parts; tubes: 2-25L6-GT; 1-6C5-GT; 1-25Z6-GT.....Jan. 1943...25¢

R-308 Three-Tube "Special" All-Wave Super. This is No. 3 set in the student "V" series. Six hand-wound coils are used. Tubes: 2-1Q5-GT; 1-1A7-GT.....Oct. 1942.....25¢

R-307 Experimenter's "Special" five-band "Twin" Two-Tuber. No. 2 in the student "V" series. Employs two type 1Q5-GT tubes; five hand-wound coils. A B-battery elimater, that appeared in the August issue may be used.....Sept. 1942...25¢

R-306 A.C.-D.C. Inter-Room Communicator System. A two-way hookup that includes a signal tone for calling. Non-critical specifications; Tubes: 1-45Z5-GT; 1-12J7-GT; 1-50L6-GT.....Aug. 1942....25¢

R-305 Beginner's Special One-Tube Flashlight Battery Set. No. 1 in the series of "V" receivers for students and experimenters, each set is an entirely different unit. Most of the same parts are employed in "V" sets Nos. 2 and 3. Tube: 1-1Q5-GT....July 1942...25¢

R-304 Two-tube Economy T.R.F. receiver. The tubes are 1-12B8-GT and 1-32L7-GT. Parts are not critical.....June 1942...25¢

R-303 "Veep" One-Tube a.c.-d.c. Emergency Pocket Receiver. This tiny broadcast receiver employs one 117L7-GT tube and operates on any 110-volt line. It is housed in a small cigar box....May 1942...25¢

R-302 "Walkie Talkie"; a compact portable local range transceiver; for use by licensed amateur radio operators. Originally deisgned for 2½ meters but easily altered for the 2 meter band. Tubes: 1-6G6-G; 1-HY 615.....Apr. 1942....25¢

R-300 "Black Light" Photo-Cell Relay Burglar Alarm System. Operates an alarm bell on an invisible "Black Light" beam at distances up to 50 feet. Tube: 1-117L7-GT.....Feb. 1942...25¢

R-298 Miniature-Tube Battery Receiver and Phono Oscillator. An inexpensive breadboard layout easily assembled from junk box parts. Tubes: 2-1S4; 1-1S5.....Jan 1942....25¢

R-296 "DX" Economy Special One-Tube a.c.-d.c. Receiver. Simple low-cost broadcast receiver for headphone use. Tube: 1-117N7-GT..Nov. '41.25¢

R-294 Improved A.C.-D.C. Little Giant "Pup". A 3-tube T.R.F. broadcast receiver. Tubes: 1-70L7-GT; 1-12K7-GT; 1-12J7-GT.....Sept. 1941..25¢

R-293 Portable Home Recorder and Player Unit Works with Receiver. Make your own recordings and play them back through any good 5 or 6 tube set; small midget receivers are not suitable. Designed around a standard recording unit. Has built-in pre-amplifier. Tubes: 1-12SJ7; 1-35Z5-GT.....August 1941....25¢

R-292 Four-Purpose Amplifier Unit for Experimenters. A simple low-cost 1-tube self-powered audio amplifier. Boosts volume of any 1-tube receiver; microphone input for home broadcasting; or, call system to other rooms. Has phono input for a record player; and it

CONTINUED ON PAGE 3

also acts as B-eliminator to supply about 80 volts for small sets. Tube: 1- 117N7-GT.....July 1941.....25¢

R-290 High-Fidelity Record Player. For direct connection to any a.c. operated radio receiver by means of a standard tube-socket phono adapter plug, or to phono pickup jacks.....May 1941.....25¢

R-289 Miniature-Tube "DX" Set Works on Flashlight Cells. An ideal "first set" for radio builders; two low cost units; use two type 1S4 miniature low-drain tubes; for phones or speaker..Apr. '41..25¢

R-287 General-Purpose T.R.F. Tuner Unit. Designed for high quality reception of local broadcasts; may be used with any radio set amplifier or P.A. system. Tubes: 2- 6K7-G; 1- 6J7; 1- 80..Feb. 1941..25¢

R-286 Two-tube A.C.-D.C. All-Wave Receiver. This all-wave set employs standard plug-in coils covering from 9½ to 550 meters; uses one 6SJ7-GT and one 32L7-GT tube: real DX getter.....Jan. 1941.....25¢

R-285 Low-Cost Receiver and Phono Amplifier for a record player. Tubes: 1- 25B8-GT; 1-70L7-GT.....Dec. 1940.....25¢

R-284 Miniature Tubes in Wearable Hearing Aid. Compact hearing-aid amplifier; three tiny radio tubes in a small case worn with neck ribbon. Tubes: 2- HY115; 1- HY125.....Nov. 1940.....25¢

R-282 Low-Cost Pack set for Camp or Boat. Self-Contained, self-powered "over-the-shoulder" portable battery-operated receiver built into a revamped 49¢ over-night bag. Tubes: 1-1D8-GT; 1- 1N5-GT; 1-1A7-GT.....Sept. 1940....25¢

R-281 Capacity-Operated Vacuum-Tube Switch. Short alarm wire operates relay to ring alarm bells, light lights, etc. at approach of person or passing object. Tubes: 1-77; 1-43;.....Aug. 1940...25¢

R-280 Beginner's One-Tuber for Short Waves. Uses type 1D8-GT tube one 45-volt B-battery and two 1½-volt flashlight A-batteries; covers 9½ to 217 meters.....July 1940.....25¢

R-275 Two-Band Flashlight-Battery Receiver. Beginner's set covers the broadcast band, also extended short-wave band. Tubes: 2-49;..... .....Feb. 1940....25¢

R-271 Beginner's One-Tube A.C.-D.C. Loudspeaker Set. Simple All-electric set uses a fixed crystal detector. Tube: 1-25A7-GT..Oct. 1939..25¢

R-267 On-A-Chair Cabinet for your Midget Receiver. Cabinet hangs on arm of an easy chair.....May 1939.....25¢

R-266 Low-Cost Three-Unit Broadcast Receiver for Beginners. Dry cell battery operated. Tubes: 2-1H5-G; 1-1N5-G...Apr. & May 1939...25¢

R-265 1939 Little Giant Portable T.R.F. Phono-Radio. Combination phonograph and 4-tube a.c. receiver. Tubes: 1-6C6; 1-6V6-G; 1-6D6: 1 type 80 rectifier.....Mar. 1939.....25¢

R-264 P.M. Simplified Tube Tester; tests over 120 different types of radio tubes; a sensitive short-tester.....Feb. 1939.....25¢

R-263 Photo-Cell Relay for 110-volts A.C. or D.C. Controls lights, alarm bells, counters, etc. Tubes: 1-25A7-G; 1 Photo-cell N-2760 (or similar).....Jan. 1939.....25¢

R-259 All-Purpose Power Supply; operates on 6-volt storage battery or 110-volt a.c. line Tubes: 1-80; 1-84.....Nov. 1938.....25¢

R-255 How to build an Armchair Cabinet for a 5-tube Receiver. Designed to hold the chassis of any small set.....July 1938.....25¢

R-254 Three-Tube Radio Direction Finder; 3-tube battery-operated loop receiver for radio direction finding on land or water. Uses 1-6J7 tube, and 2-6F5 tubes.....June 1938.....25¢

R-252 One-Tube DX Short-Wave Flashlight-Battery Receiver; similar to R-227 broadcast receiver, but for short waves only; amplifier stage included. Tube: 1-49.....April 1938....25¢

R-245 Two-Tube Portable Battery Receiver; A compact broadcast set to take to ball games or mount on bicycles. Tubes: 2-30..Dec. '37..25¢

R-243 How to Build an Eight-Tube Radio Balance; A highly efficient portable metal-locating device. Tubes: 2-31; 6-30 (or 8 type 30 tubes).....Oct. & Nov. 1937..25¢

R-236 One-Tube 6N7 Band-Spread DX Short-Wave Receiver for Beginners; hand-wound plug-in coils; tunes from 20 to 160 meters, works on 6-volt battery (or trans.) and B-batteries.....Apr. 1937...25¢

R-227 (New) Audio Amplifier added to the original One-Tube Flashlight Battery Set; Tubes 2-49.....Oct. 1937...25¢

****

Material lists, but No Blueprints, are available for the following eleven construction articles. (See back issues for circuit diagrams).

R-315 Simple "Breadboard" A.C.-D.C. Call System; Tubes: 1-32L7-GT; 1- 6C5-GT.....May 1943.....

R-318 General-Purpose Amplifier and Hearing-Aid Unit; Tubes: 2-6SJ7; 1-37.....Sept. 1943....

R-319 Two-Tube Six-Volt Emergency Set; emergency broadcast receiver operates on a 6-volt auto storage battery, Tubes: 2-6G6-G..... .....Nov. 1943.....

R-320 "Big Town" Bike Receiver; compact fixed-crystal receiver, for a bicycle. receives local broadcasting stations.....Dec. '43..

R-324 "Junk Box" Two-Way Electronic Phono System; provides 2-way communication between house, barn or garage; Tubes: 1-37; 1-38.....May 1944

R-325 "Wireless" Code Oscillator Operates Through Receiver; serves large groups without headphones. Tubes: 1-6C5; 2-6J7-GT..June '44

R-326 " Pockette" Portable Has Built-in Loop Antenna; assembled in a cigar box; fits the pocket. Operates on small flashlight batteries. Tube: 1-1S4..(See R-337 for new 2-Tube Set)....July 1944

R-329 Short-Wave "J-B" Three Uses Old Battery Tubes. Tunes from 10 to 160 meters. Either type-30, 199 or 201-A tubes used...Nov. 1944

R-330 "Seven Seas" A.C.-D.C. Short-Wave Three Tuber. Student set tunes from approximately 23 to 45 meters; includes popular 25 and 31 meter DX bands. Tubes: 3-type 6C5-GT.....Jan. 1945

R-333 Low-Cost Three Unit Test Bench for Beginners; no meters required. Includes: Continuity Checker; Audio Signal Generator; Neon Bulb Voltage Reader; Speaker With Universal Matching Transformer.....April 1945

R-340 How To Convert A Silent 16-MM Movie Projector for Sound; a general construction article illustrating the principle of the sound head, and instructions for building a suitable amplifier. Not for beginners; layout must be altered to fit individual needs.....Dec. 1945 & Jan. 1946

NOTE- R-315, R-318, R-319, R-320, R-324, R-325, R-326, R-329, R-330, R-333 and R-340 LISTS ARE AVAILABLE BUT NO BLUEPRINTS WERE ISSUED FOR THESE NUMBERS.

****TRANSMITTERS****

BLUEPRINTS and MATERIAL LISTS are available for the following Amateur Transmitters:

R-261 Compact 10 and 20-meter 400-watt Phone Transmitter; not for beginners. Tubes: 1-6F6; 1-807; 2-6J7; 2-6C5; 2-T55; 2-203-Z; 2-866 Jr.; 2-866; 1-RK-20; 2-6A3.....Dec. 1938..25¢

R-237 6L6 "Beam" tube Crystal-controlled 40-meter C.W. Transmitter for beginners; tri-tet oscillator uses 80-meter crystal and doubles to 40 in plate circuit; operates on any 400-volt, 100MA power supply. Tube: 1-6L6.....April 1937..25¢

R-216 3-Band 802 Transmitter; crystal-controlled; with power supply; no neutralizing; four 802's and one 83.....Nov. 1935...25¢

NOTE- SEE COMING ISSUES FOR NEW AND HIGHLY EFFICIENT AMATEUR TRANSMITTERS, TRANSCEIVERS AND SHORT-WAVE RECEIVERS OF ADVANCED DESIGN

IMPORTANT NOTICE
TO ALL BEGINNERS, EXPERIMENTERS, AMATEURS AND RADIO SERVICE MEN

The fixed carbon resistor values given in all material lists are now subject to the NEW R.M.A. STANDARD For Fixed Carbon Resistors which will be found in all NEW RADIO PARTS HOUSE CATALOGS. Select the nearest carbon resistor value to the one specified. For example: The nearest value to 50,000 ohms will be 47,000 ohms etc. Every student and experimenter and amateur should have a resistor color-code guide for checking purposes. The same color code is used but the Radio Parts House will supply the nearest R.M.A. carbon resistor value and you must have a color-code guide to identify each resistor you receive. This is necessary as the nearest R.M.A. value may be above rather than below the original value specified. Color-Code Guides are available from all Radio Parts Houses for 10¢. These slight differences in fixed carbon resistor values do not affect the efficiency of any circuit.

Frank L. Brittin

Frank L. Brittin (W9DCX)
RADIO and ELECTRONICS EDITOR

also acts as B-eliminator to supply about 80 volts for small sets. Tube: 1- 117N7-GT.....July 1941.....25¢

R-290 High-Fidelity Record Player. For direct connection to any a.c. operated radio receiver by means of a standard tube-socket phono adapter plug, or to phono pickup jacks.....May 1941.....25¢

R-289 Miniature-Tube "DX" Set Works on Flashlight Cells. An ideal "first set" for radio builders; two low cost units; use two type 1S4 miniature low-drain tubes; for phones or speaker..Apr. '41..25¢

R-287 General-Purpose T.R.F. Tuner Unit. Designed for high quality reception of local broadcasts; may be used with any radio set amplifier or P.A. system. Tubes: 2- 6K7-G; 1- 6J7; 1- 80..Feb. 1941..25¢

R-286 Two-tube A.C.-D.C. All-Wave Receiver. This all-wave set employs standard plug-in coils covering from 9½ to 550 meters; uses one 6SJ7-GT and one 32L7-GT tube: real DX getter.....Jan. 1941.....25¢

R-285 Low-Cost Receiver and Phono Amplifier for a record player. Tubes: 1- 25B8-GT; 1-70L7-GT.....Dec. 1940.....25¢

R-284 Miniature Tubes in Wearable Hearing Aid. Compact hearing-aid amplifier; three tiny radio tubes in a small case worn with neck ribbon. Tubes: 2- HY115; 1- HY125.....Nov. 1940.....25¢

R-282 Low-Cost Pack set for Camp or Boat. Self-Contained, self-powered "over-the-shoulder" portable battery-operated receiver built into a revamped 49¢ over-night bag. Tubes: 1-1D8-GT; 1- 1N5-GT; 1-1A7-GT.....Sept. 1940....25¢

R-281 Capacity-Operated Vacuum-Tube Switch. Short alarm wire operates relay to ring alarm bells, light lights, etc. at approach of person or passing object. Tubes: 1-77; 1-43;.....Aug. 1940...25¢

R-280 Beginner's One-Tuber for Short Waves. Uses type 1D8-GT tube one 45-volt B-battery and two 1½-volt flashlight A-batteries; covers 9½ to 217 meters.....July 1940.....25¢

R-275 Two-Band Flashlight-Battery Receiver. Beginner's set covers the broadcast band, also extended short-wave band. Tubes: 2-49;..... .....Feb. 1940....25¢

R-271 Beginner's One-Tube A.C.-D.C. Loudspeaker Set. Simple All-electric set uses a fixed crystal detector. Tube: 1-25A7-GT..Oct. 1939..25¢

R-267 On-A-Chair Cabinet for your Midget Receiver. Cabinet hangs on arm of an easy chair.....May 1939.....25¢

R-266 Low-Cost Three-Unit Broadcast Receiver for Beginners. Dry cell battery operated. Tubes: 2-1H5-G; 1-1N5-G...Apr. & May 1939...25¢

R-265 1939 Little Giant Portable T.R.F. Phono-Radio. Combination phonograph and 4-tube a.c. receiver. Tubes: 1-6C6; 1-6V6-G; 1-6D6: 1 type 80 rectifier.....Mar. 1939.....25¢

R-264 P.M. Simplified Tube Tester; tests over 120 different types of radio tubes; a sensitive short-tester.....Feb. 1939.....25¢

R-263 Photo-Cell Relay for 110-volts A.C. or D.C. Controls lights, alarm bells, counters, etc. Tubes: 1-25A7-G; 1 Photo-cell N-2760 (or similar).....Jan. 1939.....25¢

R-259 All-Purpose Power Supply; operates on 6-volt storage battery or 110-volt a.c. line Tubes: 1-80; 1-84.....Nov. 1938.....25¢

R-255 How to build an Armchair Cabinet for a 5-tube Receiver. Designed to hold the chassis of any small set.....July 1938.....25¢

R-254 Three-Tube Radio Direction Finder; 3-tube battery-operated loop receiver for radio direction finding on land or water. Uses 1-6J7 tube, and 2-6F5 tubes.....June 1938.....25¢

R-252 One-Tube DX Short-Wave Flashlight-Battery Receiver; similar to R-227 broadcast receiver, but for short waves only; amplifier stage included. Tube: 1-49.....April 1938....25¢

R-245 Two-Tube Portable Battery Receiver; A compact broadcast set to take to ball games or mount on bicycles. Tubes: 2-30..Dec. '37..25¢

R-243 How to Build an Eight-Tube Radio Balance; A highly efficient portable metal-locating device. Tubes: 2-31; 6-30 (or 8 type 30 tubes).....Oct. & Nov. 1937..25¢

R-236 One-Tube 6N7 Band-Spread DX Short-Wave Receiver for Beginners; hand-wound plug-in coils; tunes from 20 to 160 meters, works on 6-volt battery (or trans.) and B-batteries.....Apr. 1937...25¢

R-227 (New) Audio Amplifier added to the original One-Tube Flashlight Battery Set; Tubes 2-49.....Oct. 1937...25¢

****

Material lists, but No Blueprints, are available for the following eleven construction articles. (See back issues for circuit diagrams).

R-315 Simple "Breadboard" A.C.-D.C. Call System; Tubes: 1-32L7-GT; 1- 6C5-GT.....May 1943.....

R-318 General-Purpose Amplifier and Hearing-Aid Unit; Tubes: 2-6SJ7; 1-37.....Sept. 1943....

R-319 Two-Tube Six-Volt Emergency Set; emergency broadcast receiver operates on a 6-volt auto storage battery, Tubes: 2-6G6-G..... .....Nov. 1943.....

R-320 "Big Town" Bike Receiver; compact fixed-crystal receiver, for a bicycle. receives local broadcasting stations.....Dec. '43..

-OVER-

R-324 "Junk Box" Two-Way Electronic Phono System; provides 2-way communication between house, barn or garage; Tubes: 1-37; 1-38.....May 1944

R-325 "Wireless" Code Oscillator Operates Through Receiver; serves large groups without headphones. Tubes: 1-6C5; 2-6J7-GT..June '44

R-326 " Pockette" Portable Has Built-in Loop Antenna; assembled in a cigar box; fits the pocket. Operates on small flashlight batteries. Tube: 1-1S4..(See R-337 for new 2-Tube Set)....July 1944

R-329 Short-Wave "J-B" Three Uses Old Battery Tubes. Tunes from 10 to 160 meters. Either type-30, 199 or 201-A tubes used...Nov. 1944

R-330 "Seven Seas" A.C.-D.C. Short-Wave Three Tuber. Student set tunes from approximately 23 to 45 meters; includes popular 25 and 31 meter DX bands. Tubes: 3-type 6C5-GT.....Jan. 1945

R-333 Low-Cost Three Unit Test Bench for Beginners; no meters required. Includes: Continuity Checker; Audio Signal Generator; Neon Bulb Voltage Reader; Speaker With Universal Matching Transformer.....April 1945

R-340 How To Convert A Silent 16-MM Movie Projector for Sound; a general construction article illustrating the principle of the sound head, and instructions for building a suitable amplifier. Not for beginners; layout must be altered to fit individual needs.....Dec. 1945 & Jan. 1946

NOTE- R-315, R-318, R-319, R-320, R-324, R-325, R-326, R-329, R-330, R-333 and R-340 LISTS ARE AVAILABLE BUT NO BLUEPRINTS WERE ISSUED FOR THESE NUMBERS.

****TRANSMITTERS****

BLUEPRINTS and MATERIAL LISTS are available for the following Amateur Transmitters:

R-261 Compact 10 and 20-meter 400-watt Phone Transmitter; not for beginners. Tubes: 1-6F6; 1-807; 2-6J7; 2-6C5; 2-T55; 2-203-Z; 2-866 Jr.; 2-866; 1-RK-20; 2-6A3.....Dec. 1938..25¢

R-237 6L6 "Beam" tube Crystal-controlled 40-meter C.W. Transmitter for beginners; tri-tet oscillator uses 80-meter crystal and doubles to 40 in plate circuit; operates on any 400-volt, 100MA power supply. Tube: 1-6L6.....April 1937..25¢

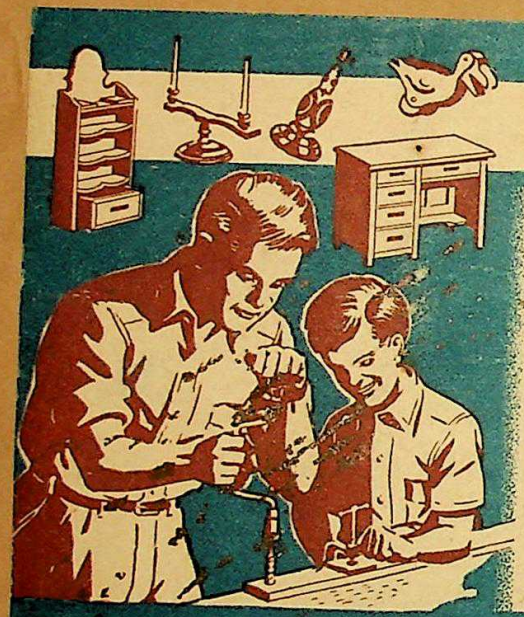
R-216 3-Band 802 Transmitter; crystal-controlled; with power supply; no neutralizing; four 802's and one 83.....Nov. 1935...25¢

NOTE- SEE COMING ISSUES FOR NEW AND HIGHLY EFFICIENT AMATEUR TRANSMITTERS, TRANSCEIVERS AND SHORT-WAVE RECEIVERS OF ADVANCED DESIGN

IMPORTANT NOTICE
TO ALL BEGINNERS, EXPERIMENTERS, AMATEURS AND RADIO SERVICE MEN

The fixed carbon resistor values given in all material lists are now subject to the NEW R.M.A. STANDARD For Fixed Carbon Resistors which will be found in all NEW RADIO PARTS HOUSE CATALOGS. Select the nearest carbon resistor value to the one specified. For example: The nearest value to 50,000 ohms will be 47,000 ohms etc. Every student and experimenter and amateur should have a resistor color-code guide for checking purposes. The same color code is used but the Radio Parts House will supply the nearest R.M.A. carbon resistor value and you must have a color-code guide to identify each resistor you receive. This is necessary as the nearest R.M.A. value may be above rather than below the original value specified. Color-Code Guides are available from all Radio Parts Houses for 10¢. These slight differences in fixed carbon resistor values do not affect the efficiency of any circuit.

Frank L. Brittin (W9DCX)
RADIO and ELECTRONICS EDITOR



POSTMASTER: This parcel may be opened for postal inspection if necess
RETURN POSTAGE GUARANTEED

POPULAR MECHANICS MAGAZI
200 E. ONTARIO ST., CHICAGO 11, ILL.

10-10-46

Ralph L. Staley
Route 2
Forest, Ohio

259 ~~mak~~ bpl

HELPFUL BOOKS and HANDICRAFT PLANS

OCT 10 1946

0-.01½ 0073